IN THE CLAIMS:

Kindly replace the claims of record with the following full set of claims:

1. (Currently amended) A transmission system for transmitting a multicarrier signal from a transmitter ~~(10)~~ to a receiver ~~(20)~~, the multicarrier signal comprising a plurality of subcarriers, the receiver ~~(20)~~ comprising a channel estimator ~~(28)~~ for estimating amplitudes of the subcarriers and for estimating time derivatives of the amplitudes, the receiver ~~(20)~~further comprising an equalizer ~~(24)~~ for canceling intercarrier interference included in the received multicarrier signal in dependence on the estimated amplitudes and derivatives ~~(29)~~, wherein the receiver ~~(20)~~ comprises a multiplication by N x N leakage matrix, and wherein the multiplication is implemented as a sequence of an N-point IFFT ~~(82)~~, N pointwise multiplications (84) and an N-point FFT ~~(86)~~.

2. (Currently amended) The transmission system according to claim 1, wherein the receiver ~~(20)~~ is a decision feedback receiver and wherein the channel estimator ~~(28)~~ comprises a smoothing filter ~~(76)~~ for smoothing the estimated amplitudes and/or derivatives.

3. (Currently amended) The transmission system according to claim 1, wherein the FFT ~~(86)~~ is further arranged for demodulating the received multicarrier signal.

4. (Previously presented) The transmission system according to claim 1, wherein the multicarrier signal is an OFDM signal.

5. (Previously presented) The transmission system according to claim 1, wherein the multicarrier signal is a MC-CDMA signal.

6. (Currently amended) A receiver ~~(20)~~ for receiving a multicarrier signal from a transmitter ~~(10)~~, the multicarrier signal comprising a plurality of subcarriers, the receiver ~~(20)~~ comprising a channel estimator ~~(28)~~ for estimating amplitudes of the subcarriers and for estimating time derivatives of the amplitudes, the receiver ~~(20)~~ further comprising an equalizer ~~(24)~~ for canceling intercarrier interference included in the received multicarrier signal in dependence on the estimated amplitudes and derivatives ~~(29)~~, wherein the receiver ~~(20)~~ comprises a multiplication by $N \times N$ leakage matrix , and wherein the multiplication is implemented as a sequence of an N-point IFFT ~~(82)~~, N pointwise multiplications ~~(84)~~ and an N-point FFT ~~(86)~~.

7. (Currently amended) The receiver ~~(20)~~ according to claim 6, wherein the receiver ~~(20)~~ is a decision feedback receiver and wherein the channel estimator ~~(28)~~ comprises a smoothing filter ~~(76)~~ for smoothing the estimated amplitudes and/or derivatives.

8. (Currently amended) The receiver ~~(20)~~ according to claim 6, wherein the FFT ~~(86)~~ is further arranged for demodulating the received multicarrier signal.

9. (Currently amended) The receiver ~~(20)~~ according to claim 6, wherein the multicarrier signal is an OFDM signal.

10. (Currently amended) The receiver ~~(20)~~ according to claim 6, wherein the multicarrier signal is a MC-CDMA signal